

PROFESSIONAL ENGINEERS, LAND SURVEYORS, PLANNERS, ENVIRONMENTAL STUDIES AND GRANT CONSULTING

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### PROPOSED WATERFRONT ACCESS PLAN GRANT NEEDS ASSESSMENT

#### BOROUGH OF BROOKLAWN,

Camden County, New Jersey

(KEI #31-113BK)

January 2015 Revised October 28, 2015

PREPARED BY:

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#### Narrative

The Borough of Brooklawn is a small community located in the westernmost portion of the County of Camden. Most of the community was constructed by the Federal Government during the years leading up to and including World War I. The purpose was to provide housing for workers employed at the Pusey and Jones Shipyard in adjoining Gloucester City. According to the 2010 Census, the population consists of approximately 2,000 people. The Borough is approximately 0.5 miles in area and is bordered by New Jersey State Highway Route 130 and Creek Road (Camden County Route No. 753) on the south, the Big Timber Creek on the east, the Delaware River and the Little Timber Creek on the north and west. The Borough is unique in that a majority of the waterfront property located along these scenic waterways (56 acres±) is owned by the municipality. The publicly owned waterfront land offers exceptional recreational and open space value and opportunity to the community and its visitors.

The Borough of Brooklawn is well known for its very successful Babe Ruth American Legion League and Youth League Baseball Programs. Much of the open space located within the municipality is dedicated to baseball and softball fields to support the needs of the athletic programs. In addition to the athletic fields, the municipality owns a significant amount of land associated with the Delaware River and Big and Little Timber Creeks. However, much of this property has remained in an unmaintained, partially inaccessible state for many years.

Over the past 5 years, Borough Officials have transformed and improved a small portion of the underutilized waterfront property for passive open space and recreation purposes providing a boat ramp, small playground and gazebo area for the residents of the community. The Borough has named this area "Waterfront Waterfront Park has become a reality because of a recent New Jersey Department of Environmental Protection loan which provided funding for the restoration and stabilization of the stream bank along a significant portion of the Big Timber Creek shoreline. The project, completed in the summer of 2010 has provided a convenient and safe area for the public to enjoy the waterfront view of the Big Timber Creek and Delaware River. This river embankment improvement project has become the foundation for the future improvements that are needed to expand and interconnect the open space areas along the waterfront and to allow for the improvements that are needed to expand and interconnect the open space areas along the waterfront. The stabilization of the shoreline was a critically needed improvement that has now fostered passive water dependent activities such as fishing and kayaking along the scenic waterways. The area is extremely popular with residents and visitors alike.

Photographs of the conditions before and after the stream bank stabilization construction are included in this Report.

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The municipal property that surrounds Waterfront Park consists of approximately thirteen (13) acres of land that offers direct access to the tidal waterfront, provides spectacular views of the Delaware River and allows for access to water dependent activities. In addition, the location of the linear alignment of open space property that surrounds the peninsula of the Borough creates the potential for approximately one mile of continuous area for a proposed pedestrian access in the form of a multi-purpose walking trail and bikeway. This multi-purpose path can be linked to the municipal ball fields, proposed pocket parks and New Broadway which is part of the Borough's small business district. In addition, the open space offers multiple opportunities or direct perpendicular waterfront access to all three bodies of water allowing water dependent activities such as kayaking, canoeing, boating, fishing, bird watching and the creation of pocket parks. Ultimately, the park and multi-purpose path will be part of the regional Camden County Open Space System. A Presentation was made to the Camden County Open Space Advisory Committee in April of 2014 and the concept was received favorably and endorsed by the Committee.

#### Open Space Property and Amenities

The municipal properties that share a connection with Big Timber Creek, Little Timber Creek and the Delaware River confluence area consist of the following:

- Block 4, Lot 1 0.47 acres
- Block 109, Lot 1 40.92 acres
- Block 109, Lot 22 8.28 acres
- Block 111, Lot 1 3 acres
- Block 110, Lot 10 3.9 acres
- Block 136, Lot 1 0.02 acres

These parcels of land are shown in Figure 1 which has been taken from the official Tax Map of the Borough of Brooklawn.

Existing open space amenities at these locations include the following:

- Block 109, Lot 1 40.92 acres
  - Primarily Tidal Marsh in an undeveloped condition
  - Shoreline access joins with Block 109, Lot 22
- Block 109, Lot 22 8.28 acres
  - Cerrone Memorial Field
  - Baseball Field with Bleachers and Concession Stand. Temporary, seasonal, portable toilets are provided.
  - Public Parking
  - Waterfront Open Space
  - Shoreline access for fishing and wildlife observation

#### Block 111, Lot 1 – 1.12 acres, Block 136, Lot 1 - 0.02 acres and Block 4, Lot 1 – 0.47 acres

- Gazebo Structure
- Small Craft Boat Launch Area
- Large Tot Lot
- Basketball Court
- Public Parking
- Benches and Waterfront Open Space
- Stabilized shoreline access for fishing and wildlife observation

#### • Block 110, Lot 10 - 3.9 acres

- Waterfront Open Space
- Small Foot Path along Little Timber Creek provides shoreline access for fishing and wildlife observation
- Public Parking
- Field of Dreams
- Baseball Field with Bleachers and Concession Stand
- Permanent but Seasonal Restroom open only during scheduled Ball Games.

#### Existing Access to Open Space

Unrestricted public access to the Borough-owned waterfront open space properties is as follows:

#### Timber Boulevard

Currently, Waterfront Park (Block 109, Lot 22, Block 136, Lot 1, Block 4, Lot 1 and Block 111, Lot 1) is accessed from Timber Boulevard which is a 30 feet wide paved municipal road with a 50 feet wide right-of-way. Timber Boulevard leads into a municipal parking lot which contains approximately 23 parking spaces. These parking spaces are available for use by the public for ball field activities, at Cerrone Memorial Field, park visitation and boat ramp users.

The area is open year round and the boat ramp area remains a strong attraction even during winter months for waterfowl hunters.

#### New Jersey Avenue and Pershing Road (West)

Block 111, Lot 1 can also be accessed from New Jersey Avenue and Pershing Road. New Jersey Road and Pershing Road both contain a 20 feet wide paved cartway within a 40 feet wide right-of-way. On-street parking is permitted. Located between New Jersey Road and Pershing Road along the Little Timber Creek is a paved public parking area which contains 25 conventional parking spaces. The waterfront portion of Block 111, Lot 1 is planned in the future to be an extension of a proposed multi-purpose path.

#### Paris Avenue

Block 110, Lot 10 and Block 111, Lot 1 also have access by way of Paris Avenue. Paris Avenue is a 26 feet wide paved road within a 50 feet public right-of-way. The road and the right-of-way terminate at the property division line between Block 110, Lot 10 and Block 111, Lot 1.

#### Pershing Road (East)

Pershing Road also provides direct access to the Field of Dreams municipal ball field complex that is associated with Block 110, Lot 10. A large portion of open space is located between the edges of the Little Timber Creek and the outfield fencing of the baseball diamond. The waterfront portion of Block 111, Lot 1 and Block 110, Lot 1 are planned in the future to be an extension of a proposed multipurpose path.

All of the locations and amenities described above are depicted on the Waterfront Access Improvement Plan located in Figure 2.

#### Existing Perpendicular Access to the Tidal Water Ways

During the construction of the riverbank stabilization project, the Borough constructed, with New Jersey Department of Environmental Protection and Army Corps of Engineers approval, a 25 feet wide boat ramp for direct water access from the terminus of Timber Boulevard to the Big Timber Creek and the Delaware River. The small craft launch area is located at the end of Timber Boulevard adjacent to the gazebo structure. While not formally dedicated by the Borough for small craft launching, the general public utilizes the access to launch personal watercraft, small motorized boats, canoes and kayaks into the Big Timber Creek. The ramp is used in winter months by waterfowl hunters for launching small boats.

#### Proposed Perpendicular Access to the Tidal Water Ways

The Governing Body intends to formally designate the existing small craft launch area as a permanent dedicated public access area to the Delaware River Waterfront.

The Governing Body also proposes to construct a continuous multi-purpose path along the entire length of the Waterfront property and the other contiguous Borough-owned properties. The estimated length of the 8 feet wide path is approximately one mile. The path will be constructed approximately 25 feet from the top of the bank of the Big Timber Creek, Delaware River and Little Timber Creek. The intent of the path will be to connect the two (2) Cerrone Memorial Field and Field of Dreams ball field locations with existing and proposed water dependent uses along the route. Table 1 provides the location and type of perpendicular waterfront access that will be proposed from the path.

Table 1: Proposed Perpendicular Waterfront Access

Proposed Location	Water Dependent Activity	Construction Type
	Small craft	Portable Floating Wood
<u>Paris Avenue</u>	Launching/Fishing	<u>Dock</u>
Area between New Jersey Ave. & Pershing Road	Fishing, Bird Watching	Wood Deck w/Steel Supports
Path terminus near Big Timber	Fishing, Bird Watching	Lawn Area/
Creek	Pocket Park	Landscaping/Benches
Path terminus along Little	Fishing, Bird Watching	Lawn Area/
Timber Creek at the Ball Field	Pocket Park	Landscaping/Benches

In addition, Timber Boulevard provides access to Marne Road, which is an unimproved right-of-way on the south side of the street. This site has the potential for the development of a future Pocket Park. The Pocket Park would also have an interconnection to Block 109, Lot 22.

Figure 2 illustrates existing and proposed access locations and other related improvements on the Waterfront Access Improvement Plan.

#### Proposed Park, Path and Access Improvements

The proposed 8 feet wide path will be constructed of stone screenings, 4" thick or bituminous surface course, 2" thick. Where applicable, the path can be constructed of porous paving material. Every attempt will be made to construct the path with minimal disturbance to the existing vegetation. Minimal tree removal is expected for the project. Appropriate traffic signage relating to the use and safety of the multi-purpose path will be erected. Lighting is not expected to be proposed, however, it will be considered as a future application.

The path to be constructed between New Jersey Avenue and Pershing Road could be an extension of the stone or bituminous construction being proposed elsewhere. If the construction budget allows, it is possible to construct a cantilever deck area from structural steel and timber to create a walkway and/or deck area for fishing.

Photographs of Little Timber Creek taken at this location are included in this Report.

Pocket Parks will be cleared and graded along the waterfront to allow for the placement of topsoil and seeding for the establishment of lawns and common areas. Trees will be planted for shade and benches will be installed for passive use. Waste receptacles will be installed for convenient disposal of solid waste.

The waterfront access to be constructed at the end of Paris Avenue will consist of prefabricated portable floating docks that can be installed and removed seasonally by the Public Works Department.

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At the terminus of Timber Boulevard, the Borough intends to provide an accessible barrier-free, permanent bathroom facility to benefit all park and ball field users. Currently one (1) conventional unisex portable toilet is provided only while the baseball season is in progress.

#### Possible Environmental Constraints

This project, by virtue of its location along substantial and navigable tidal water bodies, will be subject to multiple environmental constraints.

The most obvious constraint is that a substantial portion of the proposed improvements and access areas will be located within areas subject to flooding. Specifically, all land areas immediately adjoining Big Timber Creek and Little Timber Creek are mapped by the Federal Emergency Management Agency as being within the limits of the 1% chance annual flood. This constraint will influence structure locations and elevations and dictate certain construction techniques.

Secondly, certain areas along the water's edge will satisfy the hydrologic, vegetative and soil criteria to be classified as freshwater wetlands. As such, work will require certain specific permits in order to be executed as planned.

Physical environmental constraints that are expected are those related to construction of trails and trail amenities along the water's edge. A review of published historic aerial photographs indicates that areas in the location of Timber Boulevard and the marsh areas south of the existing boat ramp were actively filled throughout extended periods of time. The earliest available photograph from 1931 shows extensive filling south and west of the baseball field that exists at the end of Timber Boulevard. This area appears stable in 1940 and 1957, but again appears to be receiving fill again in 1965. In 1970, a road or trail appears to be in the process of being extended along the water's edge toward the Borough of Westville.

The area at the terminus of Paris Avenue likewise was receiving fill over an extended period of time, beginning around 1963. Prior to that, the limit of disturbance was limited to the immediate area surrounding the homes at the end of Paris Avenue. In 1963, filling to the east of Paris Avenue and north of the Borough's former Sewage Treatment Plant is visible. By 1965, this resulted in the creation of the current land areas occupied by the baseball field along Pershing Road and park area at the end of Paris Avenue.

Prior to engineering design for the trail or trail amenities, subsurface borings must be performed at close intervals to characterize the nature of the material. Constraints regarding soil bearing capacity, deleterious fill and construction techniques will be determined at this stage.

Results of the subsurface investigation will also influence the types of N.J.D.E.P. permitting that will be required to execute the project. Permitting will be discussed in the next section.

#### N.J.D.E.P. and Other Agency Permitting

As mentioned in the Environmental Constraints Section, N.J.D.E.P. and other agency permitting will in part be determined by the subsurface soils analysis. The balance of environmental permitting will be dictated by the projects immediate proximity to tidal waters.

A list of the anticipated N.J.D.E.P. Permits is as follows. It must be noted that this is not a complete or final list of Permits. A final list of necessary permits will be developed after the performance of boundary and topographic surveying fieldwork and after completion of the Engineering Design.

- 1) Freshwater Wetlands General Permit Number 1 for the modification or reconstruction of existing features including roads, structures or utility piping and storm sewer outfalls.
- 2) Freshwater Wetlands General Permit Numbers 17and 17A for the construction of trails or boardwalks and non-motorized multiple-use paths.
- 3) Freshwater Wetlands General Permit Number 19 for <u>Public</u> Docks and Piers in Freshwater Wetlands and/or Transition Areas. General Permit Number 19 also permits <u>public</u> boat ramp construction in wetlands, transition areas or State open water.
- 4) Freshwater Wetland General Permit Number 20 for Bank Stabilization.
- 5) Freshwater Wetland General Permit Number 26 for Minor Channel or Stream Cleaning.
- 6) Freshwater Wetland Transition Area Waivers to address various activities within transition areas. This may include transition area averaging, matrix width reduction or special activity waiver.
- 7) Municipal Construction Permits for restroom construction at Waterfront Park.

Still within the perview of the N.J.D.E.P., the following additional Permits may be required with regard to working within Flood Hazard Areas:

1) Permit by Rule for construction and maintenance activities within the project limits. Specifically, construction in a disturbed Riparian Zone at or below grade of paths or driveways.

- 2) Permit by Rule of construction of an additional boat launching ramp of no more than 1,000 square feet.
- 3) Individual Permits. The need for Individual Permits will be more accurately determined at the engineering stage.

Also within the N.J.D.E.P. Permit structure is the Waterfront Development Rules. It is likely that permits for Upland Waterfront Development will be required. The project's anticipated limits are completely within 500 feet of navigable tidal water bodies. This triggers the applicability of the N.J.D.E.P. Waterfront Development and Coastal Zone Management Rules.

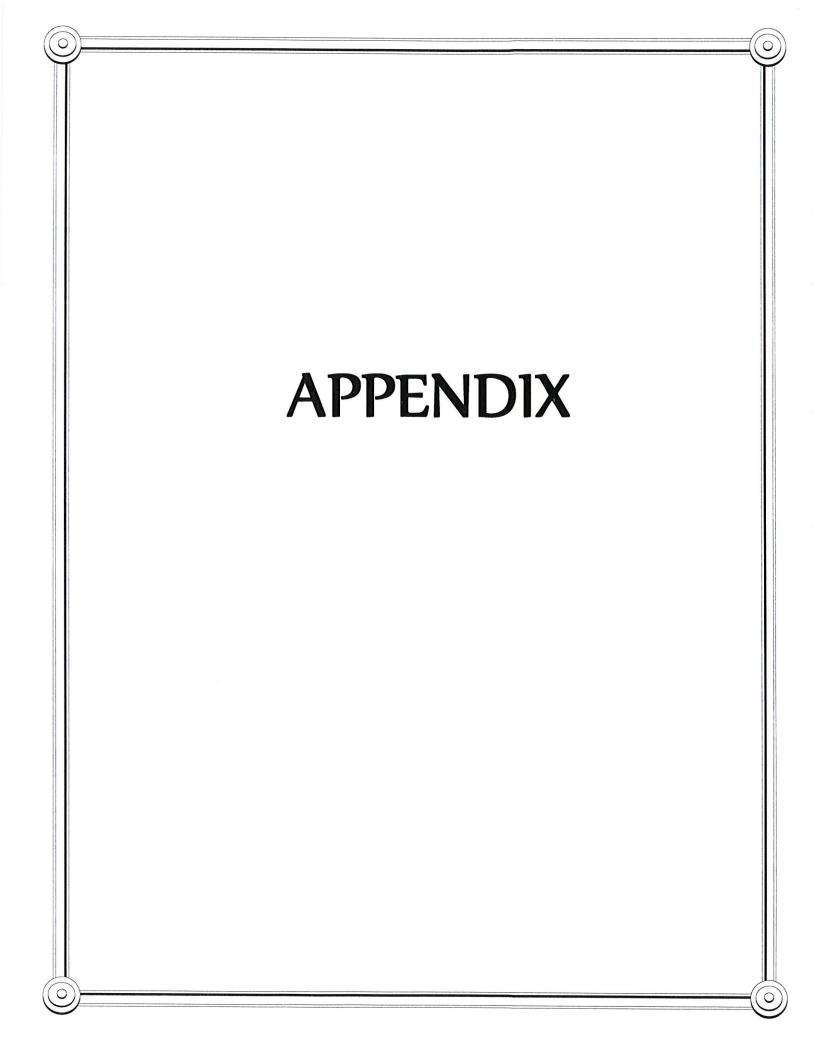
Finally, at the Federal level, it is anticipated that the Army Corps of Engineers Regulatory Branch will be consulted for appropriate Nationwide General Permits pertaining to bank stabilization and the construction of boat ramps or launches within navigable tidal water bodies.

#### Conservation Areas Needed

In order to insure public access in perpetuity, it is the intent of the Borough to encompass all of the multi-use path areas with a waterfront access easement. In the event any additional public development on municipally owned lands occurs or public lands are conveyed in the future, access and public use of the waterfront will be preserved.

#### Construction Estimates

To be provided.

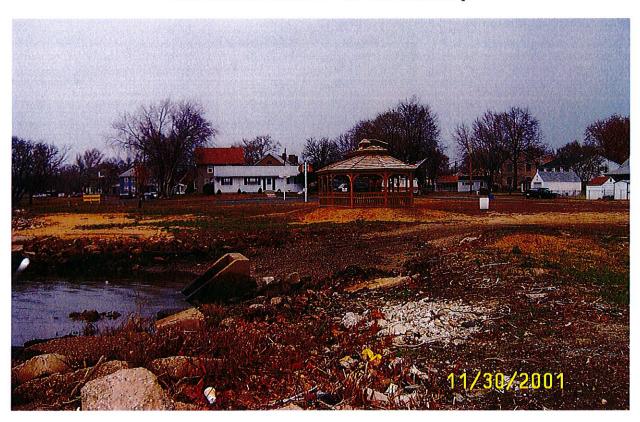




Prior to Stabilization Project Implementation



Headwall at location of dirt surfaced ramp.



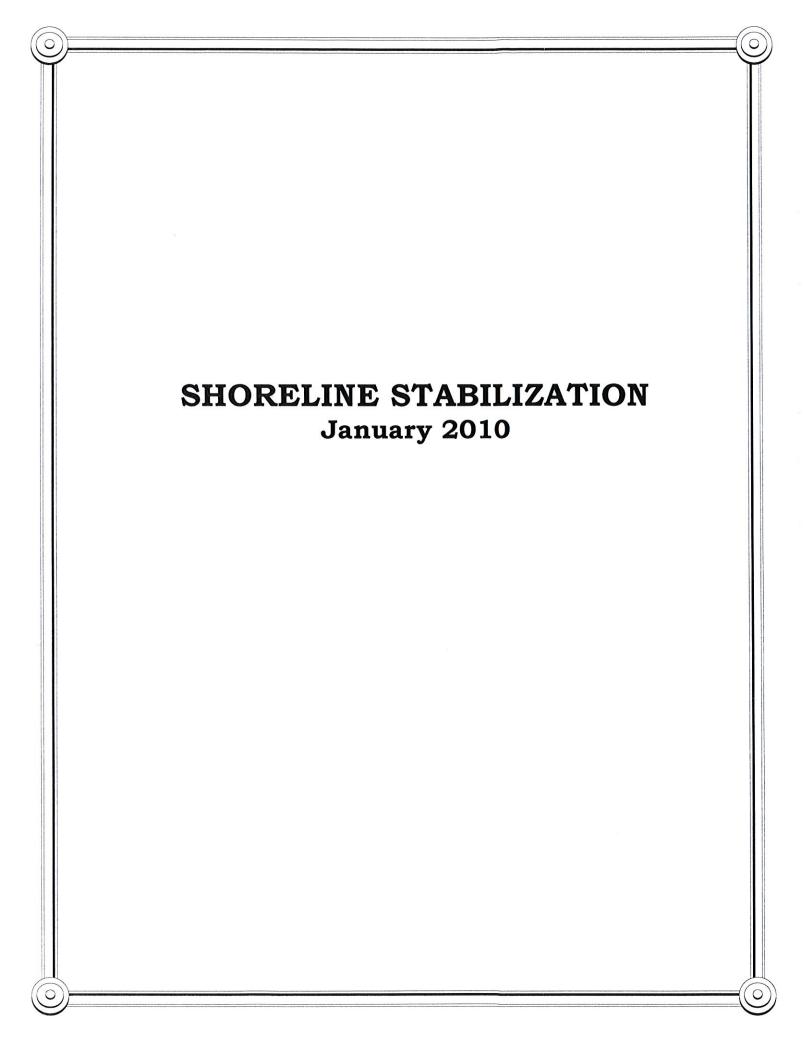
Dirt surfaced ramp prior to improvements ~ November 2001.



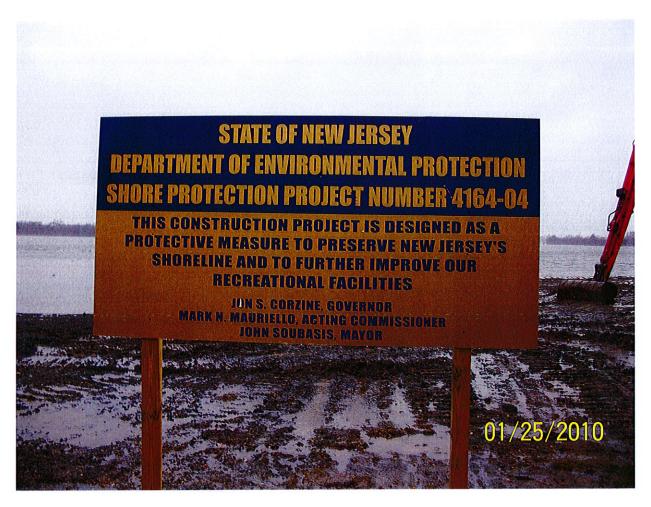
Rubble strewn shoreline ~ November 2011.



Rubble strewn shoreline ~ November 2011.







January 25, 2010







Completed stabilization looking south.



Completed stabilization looking north at Little Timber Creek confluence.



Completed boat ramp.



Bethlehem Precast Cable Mat CC-45.

END OF PARIS AVENUE
Block 111, Lot 1
Block 110, Lot 10
June 2011



A pair of geese and their goslings – Block 110, Lot 10. Area to be improved for small boat launching.



Geese and goslings ~ evidence of nearby nesting and breeding habitat.



Geese and goslings swimming upstream in Little Timber Creek.

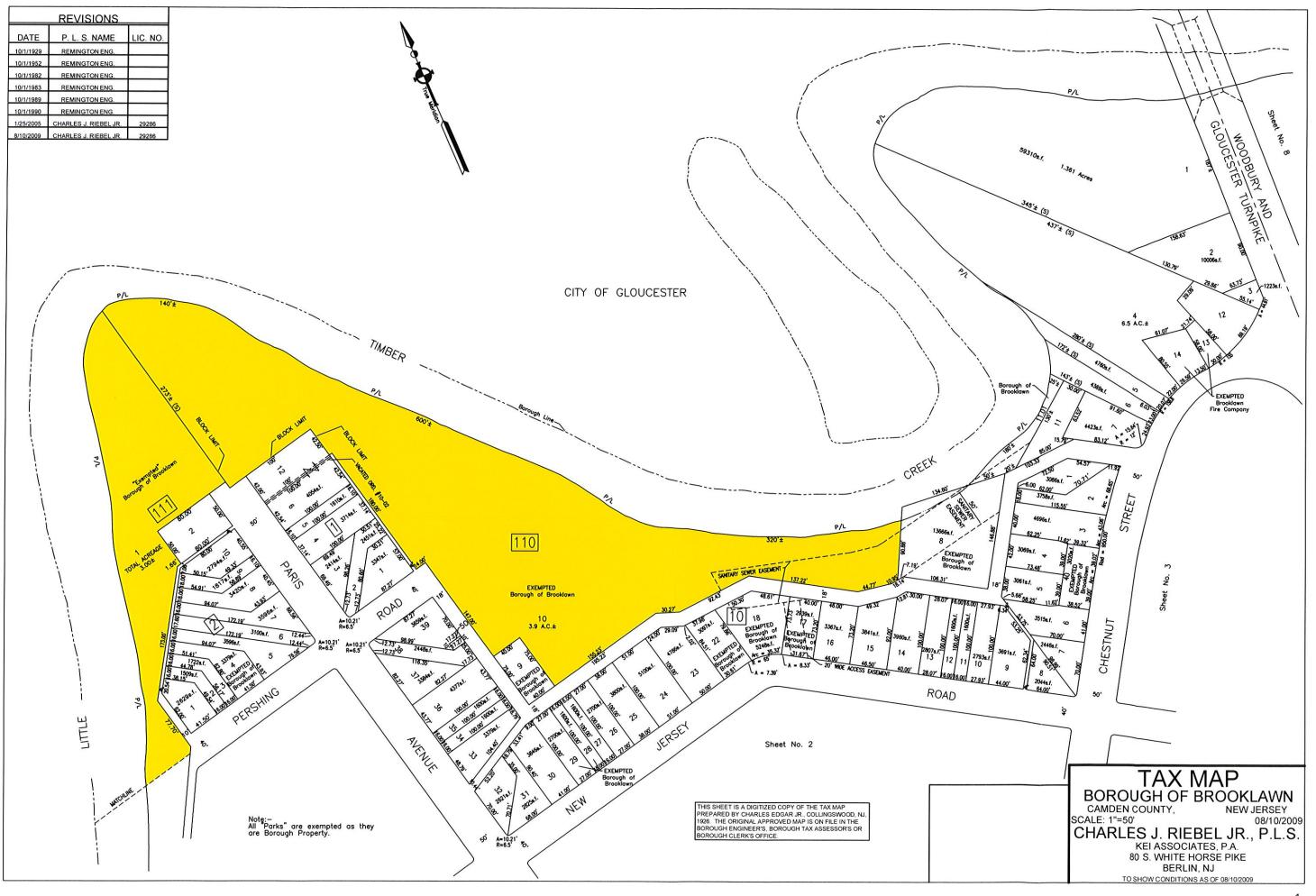


Looking downstream along Little Timber Creek from Block 111, Lot 1.

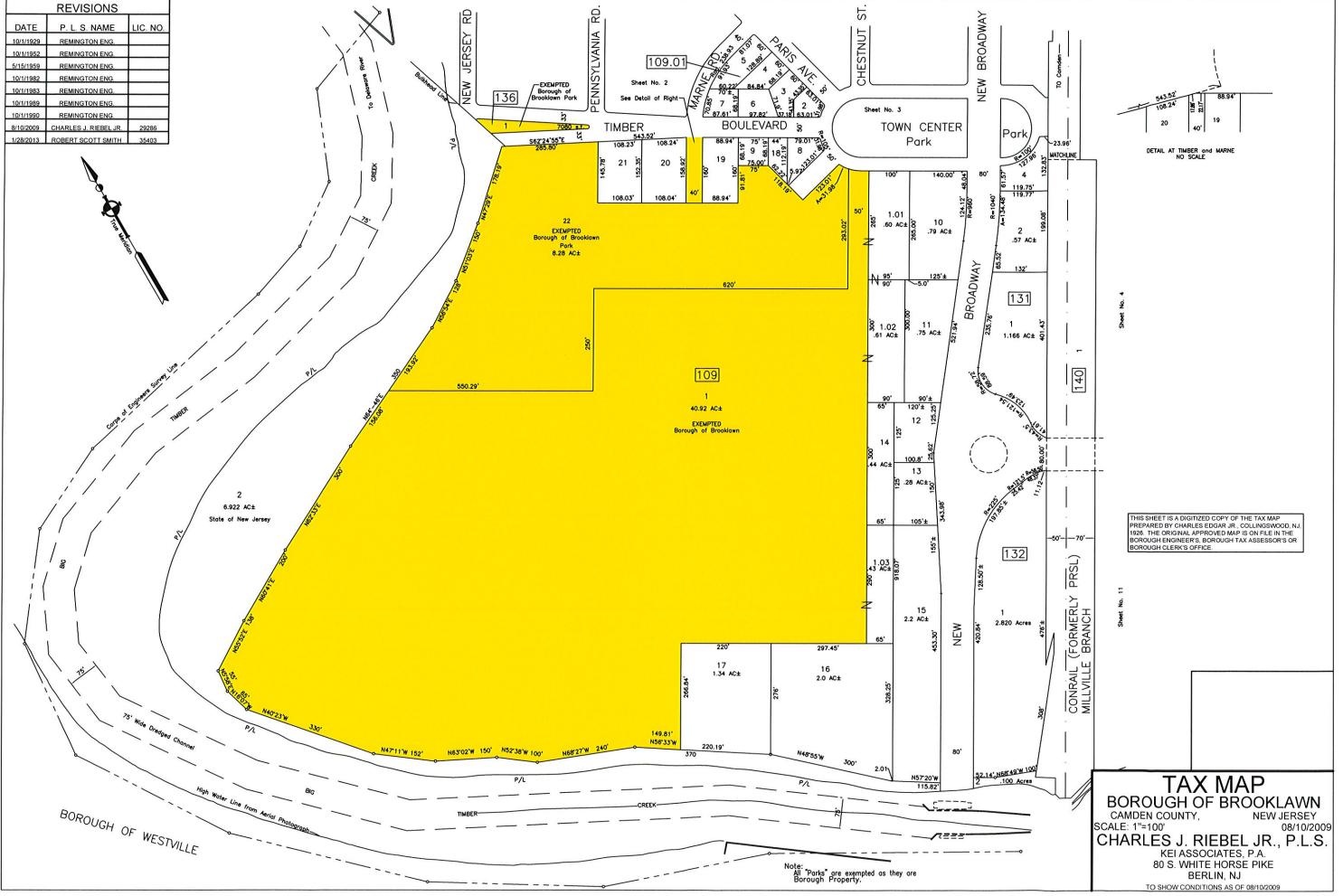
# FIGURE 1 Municipal Tax Maps

Plate 1
Plate 2
Plate 12

(Municipally Owned Parcels highlighted in yellow)

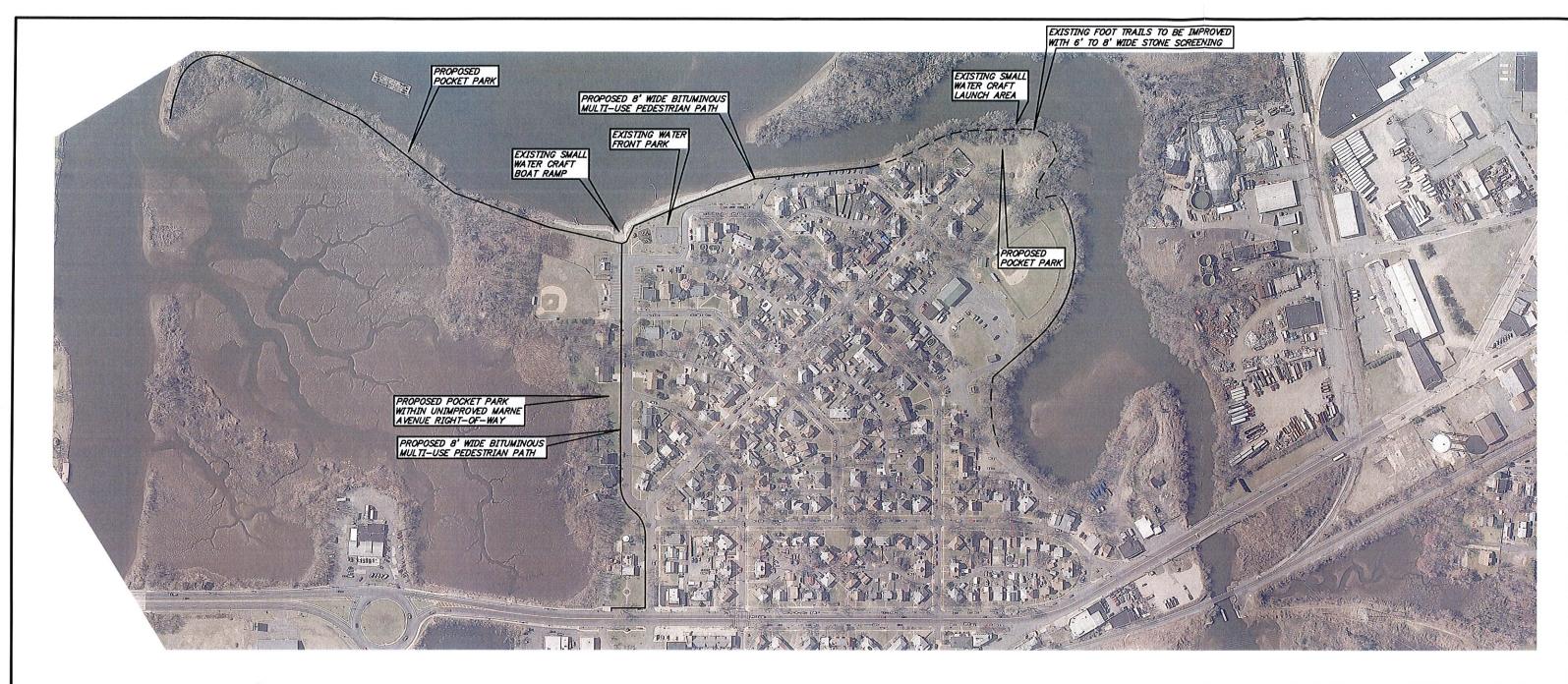


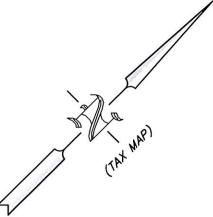




## FIGURE 2 Waterfront Access Improvement Plan

Prepared by KEI Associates, PA.
Dated January 2015





#### Legend

PROPOSED 8' WIDE BITUMINOUS MULTI-USE PEDESTRIAN PATH

EXISTING FOOT TRAILS TO BE IMPROVED

### Waterfront Access Improvement Plan

Proposed Multi-Use Trail and Related Improvements Along Big Timber Creek and Little Timber Creek

Borough of Brooklawn Camden County, New Jersey

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DATE: JANUARY 2015 DRAWN BY: T.D. SCALE: 1" = 300' PROJECT No. 31-113



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DATE